

Abstract of Disclosure

[055] An Electronic Brake Control System having four channels and three wheel speed sensors. The wheel speed sensors include a pair of speed sensors for monitoring the speeds of the individual front wheels and a single speed sensor for monitoring the speed of both rear wheels. The system monitors front wheel speeds during wheel acceleration and, upon detecting excessive slippage of one of the front wheels and the rear axle, applies the front and rear wheel brakes on the side of the slipping front wheel to transfer driving torque to the side of vehicle with a higher coefficient of road surface friction. Alternately, with a four wheel drive vehicle, both rear wheel brakes can be applied to transfer driving torque to the front wheels. The system also senses vehicle parameters during turning maneuvers and, upon detecting an understeer situation, the system is operative to apply one of the rear wheel brakes to correct the understeer.